

Work Order ID: 73335

Wednesday, August 31, 2011 11:03:51 AM



Page 1

Item ID: D3407-1

Accept



Setup Start



Revision ID:

Item Name: Stem

Stop



Start Date: 9/1/2011

Start Qty: 20.00



Cust Item ID:

Required Date: 9/15/2011

Req'd Qty: 20.00



Customer:

Reference:

Approvals:

Process Plan: *MW*

Date: 11-09-01

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3407	Rev E

100 0.00

	DOOSAN LATHE
--	--------------

Doosan

Doosan Lathe

Memo *W/A* 0.001-Turn as per Folio FA596 Rev: *W/A* & Dwg D3407 Rev: *B* QC2-Deburr*30* *0*

110

QC2- Inspect parts off machine FAI/FAIB

0.00

	QC
--	----

Quality Control

Memo *W/A* 0.00*30* *0*

120

QC8- Inspect parts - second check

0.00

	QC
--	----

Quality Control

Memo *W/A* 0.00*11-09-24*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

Work Order ID 73335

Page 2

Wednesday, August 31, 2011 11:03:51 AM

Item ID: D3407-1

Accept



Setup Start



Revision ID:

Item Name: Stem

Stop



Start Date: 9/1/2011 Start Qty: 20.00



Cust Item ID:

Required Date: 9/15/2011 Req'd Qty: 20.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

Identify as per dwg & Stock Location: USA,

0.00

SP 11-09-28

Packaging

Memo

0.00

Packaging

140



QC21- Final Inspection - Work Order Release

0.00

11/9/28

QC

Memo

0.00

Quality Control

MR 11-09-28

W/O:		WORK ORDER CHANGES					
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Picklist Print

Page 1

Wednesday, August 31, 2011 11:03:48 AM

Work Order ID: 73335



Parent Item: D3407-1



Parent Item Name: Stem

Start Date: 9/1/2011

Required Date: 9/15/2011

Start Qty: 20.00

Required Qty: 20.00

Comments: IPP Rev:A 05.10.18 New issue KJ/EC

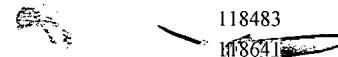
IPP Rev:B Now on Doosan 08-05-14 JLM Verified By:DD

IPP Rev:C 08-08-12 revE as per dwg (ecn 08-507) DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M174R0.750 		Purchased	No			100	f	32.4650	0.366	7.705263			

17-4 round bar .750

Location	Loc Qty	Loc Code
MAT030	32.465	
117683	0.465	
118483	8	
118641	24	



4/24

125

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

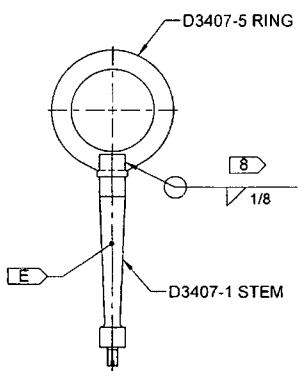
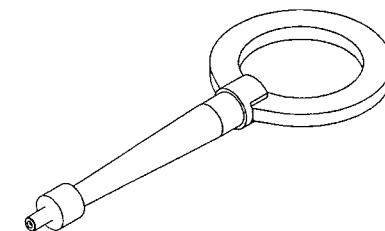
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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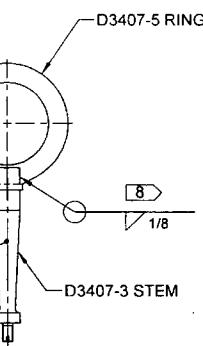
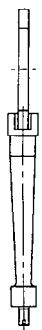
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E

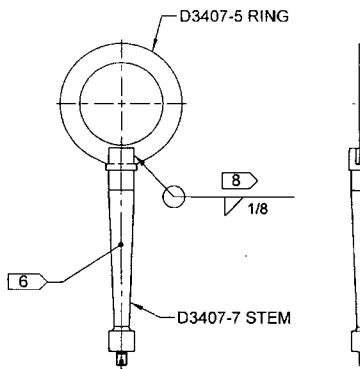
QTY -041	QTY -043	QTY -045	PART NUMBER	DESCRIPTION
X			D3407-041	TOW RING
	X		D3407-043	TOW RING
		X	D3407-045	TOW RING
1			D3407-1	STEM
1	1		D3407-3	STEM
1	1	1	D3407-5	RING
		1	D3407-7	STEM



D3407-041 TOW RING



D3407-043 TOW RING



D3407-045 TOW RING

RELEASED
08-07-23

A NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3 (EXCEPT THREADS)
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3407-XXX" USING BLACK FINE POINT PERMANENT INK MARKER 
- 7) WEIGHT: D3407-041 - 0.60 lbs, D3407-043 - 0.53 lbs, D3407-045 - 0.61 lbs
- 8) WELD PER DART QSI 004 ON ALL EDGES BETWEEN STEM AND RING

13335

E	ADD D3407-045 (ZN B2-1, D8-1); ADD D3407-7 (ZN B6-5); REVISED NOTE 6 TO ADD IDENTIFICATION (ZN A5-1); REASON: PRODUCTION FACILITY	PH	08.07.23
D	D3407-1/2 SLOT WAS ROUND NOW FLAT FOR ASSEMBLY WITH D3407-5 (ZN C2-2, C2-3); D3407-5 WAS ROUND NOW FLAT ON ONE END FOR ASSEMBLY WITH D3407-1/3 (ZN B6-4); REASON: PRODUCTION FACILITY	PH	08.04.07
C	-1/3 LONGER FOR FIT W/WASHER	CP	05.09.09
B	UPDATE DIAMETER, THREAD CLASS ADDED	CP	05.06.17
A	NEW ISSUE	CP	05.03.16
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>100</i>	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
DRAWN	<i>100</i>		
CHECKED			
MFG. APPR.	<i>100</i>	DRAWING NO. D3407 REV. E	
APPROVED	<i>100</i>	SHEET 1 OF 5	
DE APPR.	<i>100</i>	TITLE TOW RING SCALE NTS	
DATE	08.07.23	COPRIGHT © 2005 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS THE PROPERTY OF DART AEROSPACE USA, INC. IT IS A TRADE SECRET AND IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

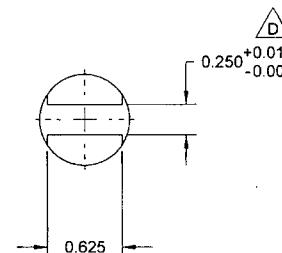
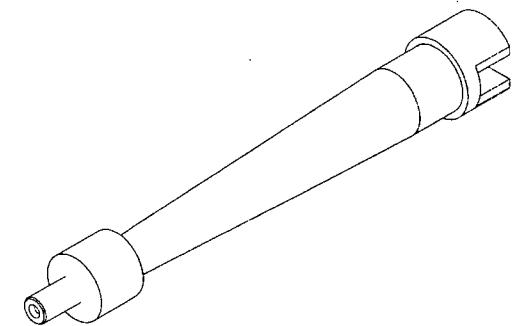
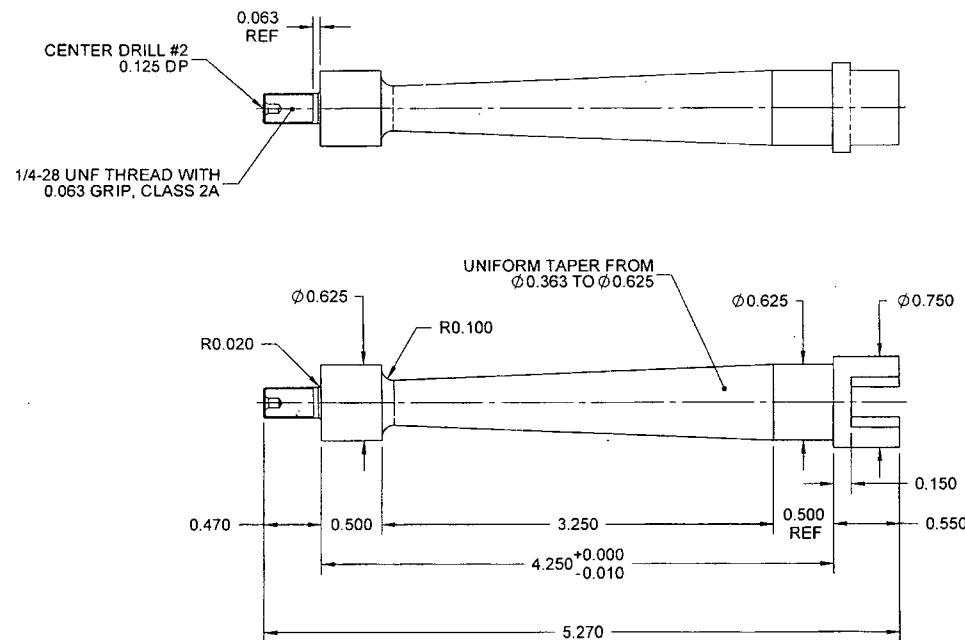
W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3407-1 STEM

73335

RELEASED
07-07-1987

NOTES:
1) MATERIAL: 17-4 PH SS ROUND BAR PER AMS 5643 (REF. DART SPEC M17-4-R)
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
6) IDENTIFICATION: N/A
7) WEIGHT: 0.33 lbs

DESIGN	102	DART AEROSPACE USA, INC.		
DRAWN	104	PORT HADLOCK, WA		
CHECKED		DRAWING NO.	REV. E	
MFG. APPR.		D3407	SHEET 2 OF 5	
APPROVED		TITLE	SCALE	
DE APPR.		TOW RING	NTS	
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W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

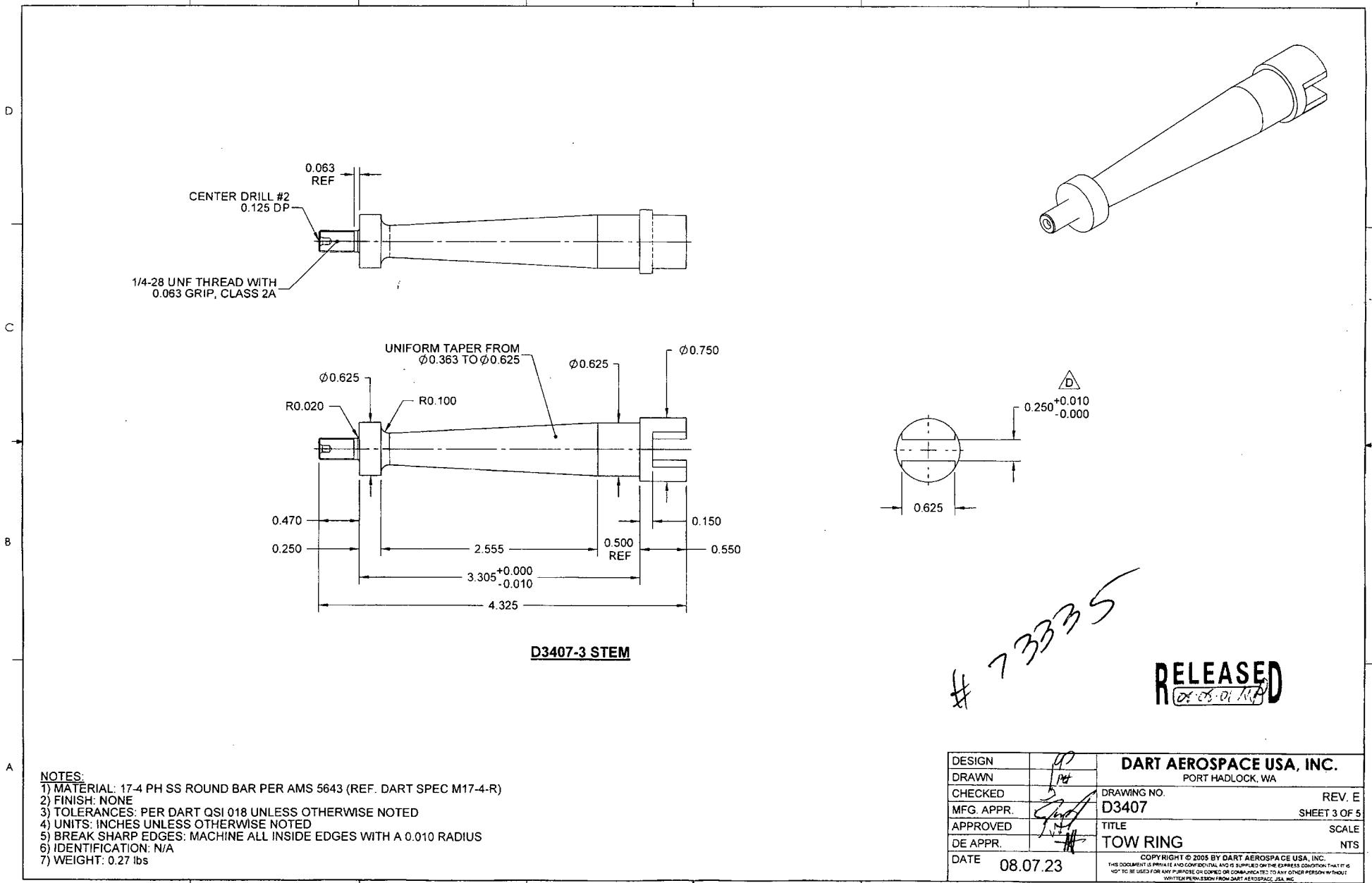
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1



DESIGN	90	DART AEROSPACE USA, INC.	
DRAWN	Pat	PORT HADLOCK, WA	
CHECKED	5	DRAWING NO.	REV. E
MFG. APPR.	✓	D3407	SHEET 3 OF 5
APPROVED	N	TITLE	SCALE
DE APPR.	✓	TOW RING NTS	
DATE	08.07.23	COPYRIGHT © 2005 BY DART AEROSPACE USA, INC.	
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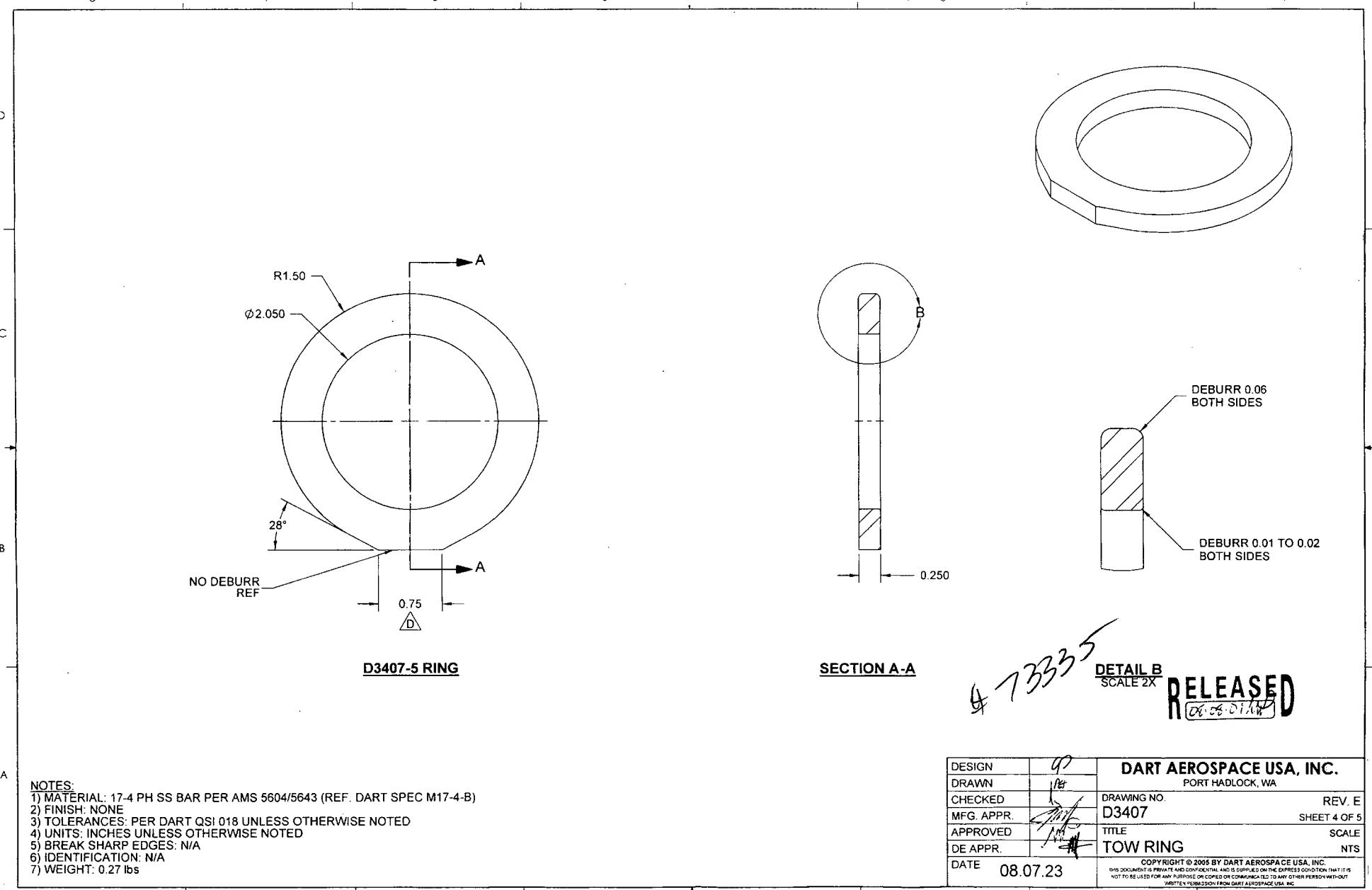
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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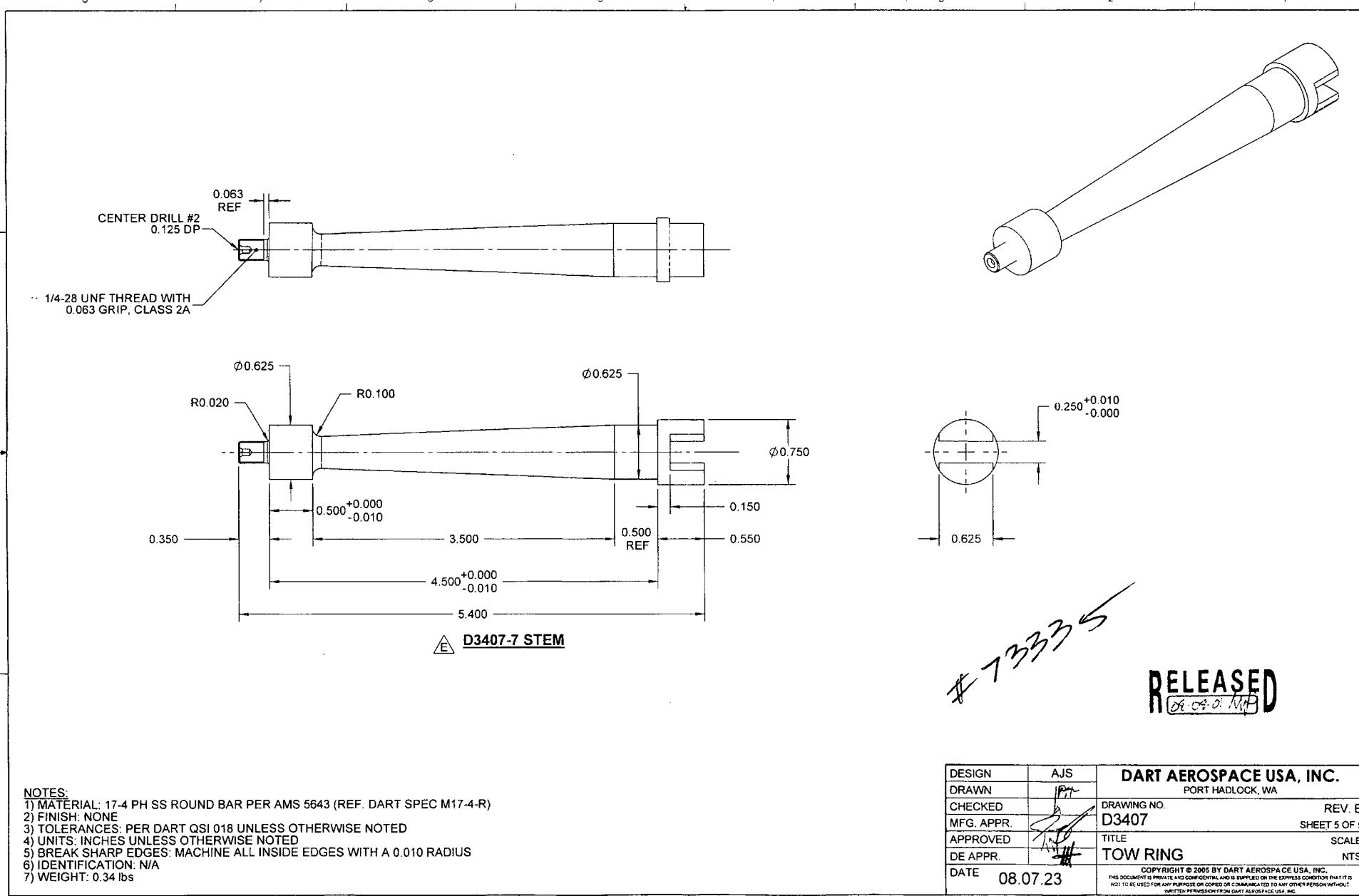
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NOTES:
 1) MATERIAL: 17-4 PH SS ROUND BAR PER AMS 5643 (REF. DART SPEC M17-4-R)
 2) FINISH: NONE
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
 6) IDENTIFICATION: N/A
 7) WEIGHT: 0.34 lbs

DESIGN	AJS	DART AEROSPACE USA, INC.
DRAWN	<i>IPM</i>	PORT HADLOCK, WA
CHECKED		DRAWING NO. D3407
MFG. APPR.	<i>SP</i>	REV. E
APPROVED	<i>SP</i>	SHEET 5 OF 5
DE APPR.	<i>SP</i>	TITLE TOW RING
DATE	08.07.23	SCALE NTS

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DART AEROSPACE LTD	Work Order:	73335
Description: Tow Ring	Part Number:	D3407-1
Inspection Dwg: D3407	Rev: E	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

Measured by:	5	Audited by:	5L	Prototype Approval:	N/A
Date:	11/09/26	Date:	11-09-27	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	06.09.19	New Issue	KJ/JLM	
B	07.07.18	Tolerances for diameters updated per Machinists	KJ/JLM	
C	08.05.14	Dimensions updated per Dwg Rev D	KJ/JLM	
D	08.10.07	Dimensions updated per Dwg Rev E	KJ/DD	 

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